

INEEL Groundwater Integration Project Meeting Minutes December 17, 2003, TSB-112

Attendees:

Richard Kauffman	NE-ID	kauffmrm@id.doe.gov
Leroy Knobel	USGS	llknobel@usgs.gov
Marilynne Manguba	INEEL	mangma@inel.gov
Travis McLing	INEEL	tml@inel.gov
Erick Neher	ICP	neheer@inel.gov
Brennon Orr	Northwind, Inc.	borr@nwindenv.com
Jeff Perry	NE-ID	perryjn@id.doe.gov
Catherine Reno	ICP	renoca@inel.gov
Tim Safford	NE-ID	saffortj@id.doe.gov
Erik Simpson	ICP	eas@inel.gov
Doug Vandel	ICP	dsv@inel.gov
Paul Wichlacz	INEEL	plw@inel.gov
Tom Wood	INEEL	tw@inel.gov

Via Conference Call

Jeremy Maxand	Snake River Alliance	sra@snakeriveralliance.org
John Nimmo	USGS	jrnimmo@usgs.gov
Gerry Winter	ID DEQ	gwinter@deq.state.id.us

Safety Share

Erick Neher shared some tips on holiday safety.

Technetium-99 Briefing

Erick provided a briefing on the Tc-99 Investigation at INTEC. Phase 1 Results and the Phase II Investigation and Path Forward (see attached presentation).

The Tank Farm Aquifer Well (ICPP-MON-A-230) was installed in 2001. Results from the first routine sampling done in May, 2003 showed a level of 2220 pCi/L. Resampling in August confirmed the May results. The IDAPA and drinking water standards are 900 pCi/L.

Action taken included

- Institution of monthly sampling of the well,
- Analysis of archived water samples from selected INTEC wells for Tc-99
- Perched water and lysimeter sampling
- Evaluation of well construction
- Review of vadose zone stratification
- Neutron logging and colloidal borescope logging of well
- Pumping test
- Core sampling and analysis
- Capture zone analysis of INTEC supply wells
- Evaluation of Tc-99 source(s) at INTEC

Summary of Phase I results

- Tc-99 is not attributable to downhole cross-contamination from installation of MON-A-230
- Tc-99 was detected in core samples
- Aquifer is very permeable at this location
- Tc-99 appears to have been present in the aquifer beneath the northern portion of INTEC for many years
- Mostly like source of Tc-99 appears to be from past releases at the Tank Farm

- Most likely mechanism for transport is downward movement of contaminated water through the vadose zone to the water table
- Former INTEC injection well likely constituted an earlier source of Tc-99, but concentrations were far below the MCL

The proposed Phase II Path Forward includes

- Two new well sets south of the Tank Farm
- shallow perched, deep perched, and aquifer skimmer well
- Groundwater sampling and analysis
- Colloidal borescope survey

Additional details are included in the attached presentation.

Next Meeting: January 14th, 1 p.m. TSB-B